

Amendments to the Specification

Please replace the paragraph beginning on Page 14, line 24 and ending on Page 14, line 28 with the following amended paragraph:

The device may be incorporated into the enclosure in any manner which enables the device to be in vapor communication with the enclosed space. For example, the device can be partially or wholly disposed within the enclosed space. Also, the inlet of the device can be in fluid communication with the ambient air, rather than the enclosed space, to provide fresh, dry air to the enclosure.

Please replace the paragraph beginning on Page 16, line 1 and ending on Page 16, line 15 with the following amended paragraph:

Preferably, the cooling device can be easily removed from the enclosure or garment with little or no adverse affect on the enclosure or garment. For example, the cooling device may include a casing enclosing the device, whereby the casing is designed to fit interchangeably with the enclosure or garment. For example, the casing can include a male fitting which is adapted to fit within a female fitting, wherein the female fitting is incorporated into the enclosure and is in vapor communication with the internal environment of the enclosure. When the female and male ~~fitting~~ fittings are combined, they create a fluid communication path between the enclosure and the cooling device. Preferably, the female and male ~~fitting~~ fittings also, when combined, create a hermetically sealed enclosure with respect to the outside environment thereby preventing fluid communication between the cooling device and the outside environment and also preventing fluid communication between the enclosure and the outside environment. This is especially significant in the case of Hazmat suits, described above, as persons working in Hazmat suits generally desire to avoid fluid communication with the outside environment.

Please replace the paragraph beginning on Page 18, line 17 and ending on Page 18, line 20 with the following amended paragraph:

The layers of PCM, flow channel material, and carbon sheets are assembled as illustrated in Fig.1. If the sides of the device terminate with a PCM (as opposed to

terminating with a flow channel as illustrated in Fig. 1), only one-half of the amount of PCM is needed on the sides since it is cooling only one carbon sheet desiccant layer.

Please replace the paragraph beginning on Page 19, line 9 and ending on Page 19, line 14 with the following amended paragraph:

Twelve pieces of flow channel material (Delstar, Austin, TX) are cut and arranged in pairs so that the weave on one layer is perpendicular to the weave on the second layer. The carbon sheets, PCM bags, and flow channel are assembled under a nitrogen environment to prevent the modified carbon sheets from adsorbing water. Two 10 cm x 15 cm Lexan polycarbonate pieces (Regal Plastics, Albuquerque, NM) are placed on the top and the bottom of the stack and bound together with duct tape.

Please replace the paragraph beginning on Page 19, line 17 and ending on Page 20, line 3 with the following amended paragraph:

This device has 12 layers of modified carbon and 12 layers of flow channel material. All layers are a finished size of 10 cm x 15 cm. The carbon sheets each weigh about 7.2 grams, 50% of which is carbon. For a 50% LiCl / 50% carbon loading, a total of 3.6 grams of LiCl is impregnated into each sheet. The 3.6 grams of LiCl is dissolved into 8.5 ml of 50% deionized water / 50% methanol. The carbon sheet is pre-treated with 0.5 ml of 50% deionized water / 50% methanol on each side. While the sheet is still moist, a total of 3 ml of the salt/water/alcohol mixture is wicked into the sheet. Then the sheet is placed in a 50°C oven for at least two hours to dry. The sheet is then wicked a second time (after pre-treating) with about 3 ml of salt/water/alcohol mixture. The sheet is again dried at 50°C for at least two hours, then again pre-treated and wicked with the remaining solution. The sheet is now ready for its final drying at 70°C in a vacuum oven overnight. Twelve pieces of flow channel material are cut and arranged in pairs so that the weave on one layer is perpendicular to the weave on the second layer. The carbon sheets and flow channel material are assembled under a nitrogen environment to prevent the modified carbon sheets from adsorbing water. Two Lexan polycarbonate pieces are placed on the top and the bottom of the stack and bound together with duct tape.

Please replace the paragraph beginning on Page 20, line 20 and ending on Page 21, line 9 with the following amended paragraph:

This device includes 12 layers of modified carbon, 7 PCM bags, and 12 layers of flow channel material. All layers are a finished size of about 25 cm x 25 cm. The carbon sheets each weigh about 30 grams, 50% of which is carbon. For a 50% LiCl / 50% carbon loading, a total of 15 grams of LiCl is impregnated into each sheet. The 15 grams of LiCl is dissolved into 35 ml of 50% deionized water / 50% methanol. The carbon sheet is pre-treated with 2 ml of 50% deionized water / 50% methanol on each side. While the sheet is still moist, a total of 12 ml of the salt/water/alcohol mixture is wicked into the sheet. Then the sheet is placed in a 50°C oven for at least two hours to dry. The sheet is then wicked a second time (after pre-treating) with about 12 ml of salt/water/alcohol mixture. The sheet is again dried at 50°C for at least two hours, then again pre-treated and wicked with the remaining solution. The sheet is now ready for final drying at 70°C in a vacuum oven overnight. The PCM bags are made of Rexam. The measurements from inside seal to inside seal are about 25 cm x 25 cm. Five of these bags are filled with 424 grams of sodium sulfate decahydrate. The other two bags are filled with 212 grams of the PCM for the end pieces. Twelve pieces of flow channel material are cut and arranged in pairs so that the weave on one layer is perpendicular to the weave on the second layer. The carbon sheets, PCM bags, and flow channel material are assembled under a nitrogen environment to prevent the modified carbon sheets from adsorbing water. Two Lexan polycarbonate pieces are placed on the top and the bottom of the stack and bound together with duct tape.